

# **\*\*ATTENTION\*\***

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## **Mountain Sucker**

*Catostomus platyrhynchus*

### **Range:**

The mountain sucker is distributed in the Great Basin, upper Missouri, upper Colorado, Fraser, and Columbia River systems, from California east to western South Dakota and Nebraska, and north to British Columbia and Saskatchewan (Wydoski and Whitney 1979).

### **Washington Distribution:**

Mountain suckers are found only in the upper Columbia River and its tributaries east of the Cascade Mountains. Washington populations are less abundant compared to those of other states and provinces of occurrence (Scott and Crossman 1973).

### **Habitat Requirements:**

The mountain sucker lives in mountain streams with clear cold water with sand, gravel, or boulder bottoms (Wydoski and Whitney 1979). Spawning occurs in riffles below pools in June and July when water temperature is between 10.5 - 18.88 degrees C (51 - 66 F) (Smith 1966, Hauser 1969). After spawning, adults are found in habitats associated with bank cover in deep pools (Hauser 1969). Fingerling habitat consists of shallow areas with moderate current and abundant vegetation, usually behind obstructions (Wydoski and Whitney 1979). Fingerlings can also occur in deep pools. Older juveniles are usually found near cover in shallow water of moderate (0.5 m/sec) current (Hauser 1969). Preferred food consists almost entirely of algae scraped from the rocky substrate, however mountain suckers will also eat insect larvae (Wydoski and Whitney 1979).

### **Limiting Factors:**

Stream temperatures which exceed the normal spawning range, a lack of spawning habitat, high sedimentation in spawning areas, and/or a lack of preferred food items will limit the population and range of mountain suckers.

### **Management Recommendations:**

The maintenance of riparian vegetation is essential for controlling stream temperature, providing cover, and protecting against lateral erosion. Removal of streamside vegetation lowers canopy density (shading) and increases sedimentation. Increases in solar radiation raises stream temperatures thereby negatively impacting spawning, hatching, and rearing survival. Increased sedimentation contributes to the loss of spawning habitat and decreases the diversity of aquatic invertebrates and other food items (Newbold et al. 1980, Noss 1983, Heede 1985). Buffer zones along stream banks should be at least the width of the height of the tallest tree or 15.2 m (50 ft), whichever is wider. The vegetative buffer will provide erosion control, and maintain natural stream temperatures and diversity of aquatic invertebrates (Meehan et al. 1977, Newbold

et al. 1980). In Washington, this can range up to 60 m (200 ft.). This "zone of influence" (Meehan et al. 1977) should be maintained along stream banks which provide mountain sucker habitat, and any other stream which directly or indirectly influences mountain suckers. Road construction and maintenance activities should be avoided adjacent to streams with mountain suckers. In-stream structures such as bridges, piers, boat ramps, or culverts must not impede the natural movements of mountain suckers.

#### References:

Heede, B.H. 1985. Interactions between streamside vegetation and stream dynamics. in Proceed. Symp. of Riparian Ecosystems and their Management: Reconciling Conflicting Uses, April 16-18, 1985, Tucson, AZ.

Meehan, W.R., F.J. Swanson, and J.R. Sedell. 1977. Influences of riparian vegetation on aquatic ecosystems with particular reference to salmonid fishes and their food supply. P. 137-145 in Proceed. Symp. on the Importance, Preservation, and Management of the Riparian Habitat, July 9, 1977, Tucson, AZ.

Newbold, J.D., D.C. Erman, and K.B. Roby. 1977. Effect of logging on macroinvertebrates in streams with and without buffer strips. J. Fish. Aquat. Sci. 37:1076-1085.

Noss, R.F. 1983. A regional landscape approach to maintain diversity. BioS. 33(1):700-706.

Scott, W.B. and E.J. Crossman. 1973. Freshwater fishes of Canada. Fish. Res. Bd. Canada. Bull. 14.

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#### Key Points:

##### Habitat Requirements:

- Inhabits mountain streams with clear cold water with sand, gravel, or boulder bottoms.
- Preferred temperatures range between 10.5 - 18.8 degrees C for spawning.
- Spawning occurs in riffles below pools in June and July.
- Fingerling habitat consists of shallow areas with moderate current and abundant vegetation, usually behind obstructions, and deep pools.
- Older juveniles are usually found adjacent to pools where the current is about 0.5 m per second.
- Algae scraped from the rocky substrate is the preferred food.

##### Management Recommendations:

- Buffer zones of at least the width of the height of the tallest tree (or 15.2 m

(50 ft), whichever is wider) should be maintained along stream banks which provide mountain sucker habitat, and any other stream which directly or indirectly influences mountain sucker habitat.

- Road construction and maintenance activities should be avoided adjacent to streams which provide mountain sucker habitat.

- In-stream structures such as bridges, piers, boat ramps, or culverts must not impede the natural movements of mountain suckers.